

WAFER INSPECTION SYSTEM FOR
DISTINGUISHING PITS AND PARTICLES

Abstract of the Disclosure

5 A surface inspection system and method is provided which detects defects such as particles or pits on the surface of a workpiece, such as a silicon wafer, and also distinguishes between pit defects and particle defects. The surface inspection system comprises an inspection station for receiving a workpiece and a scanner positioned and arranged to scan a surface of the workpiece at the inspection station.

10 The scanner includes a light source arranged to project a beam of P-polarized light and a scanner positioned to scan the P-polarized light beam across the surface of the workpiece. The system further provides for detecting differences in the angular distribution of

15 the light scattered from the workpiece and for distinguishing particle defects from pit defects based upon these differences.